

FIG. 1

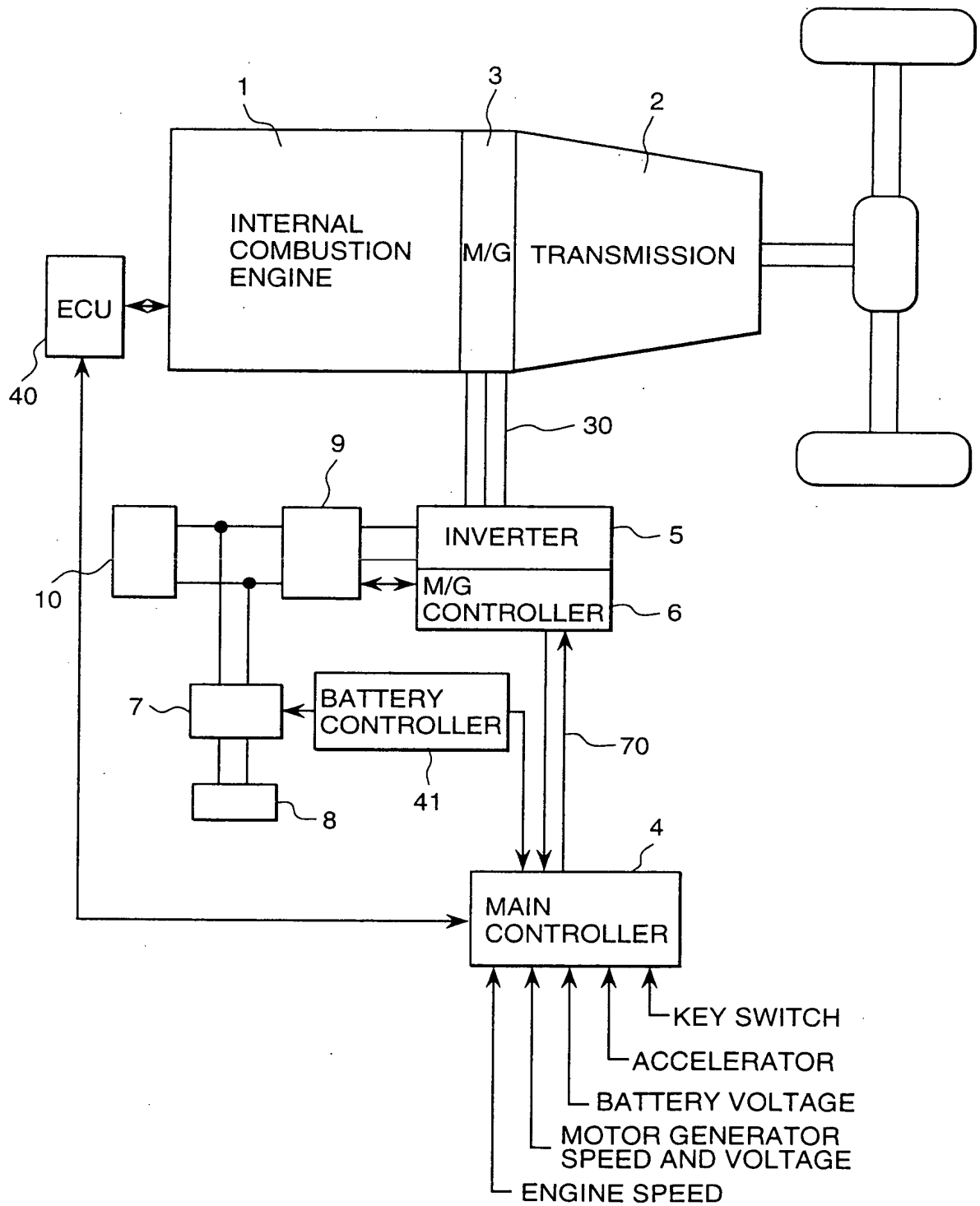




FIG. 3

OPERATION MODE	START OF INTERNAL COMBUSTION ENGINE	TORQUE ASSIST FOR INTERNAL COMBUSTION ENGINE	POWER GENERATION
CONTROL	(STEP-UP CHOPPER)+ STRONG MAGNETIC FIELD	(STEP-UP CHOPPER)+ STRONG MAGNETIC FIELD WEAK MAGNETIC FIELD	STEP-DOWN CHOPPER+ WEAK MAGNETIC FIELD

FIG. 5

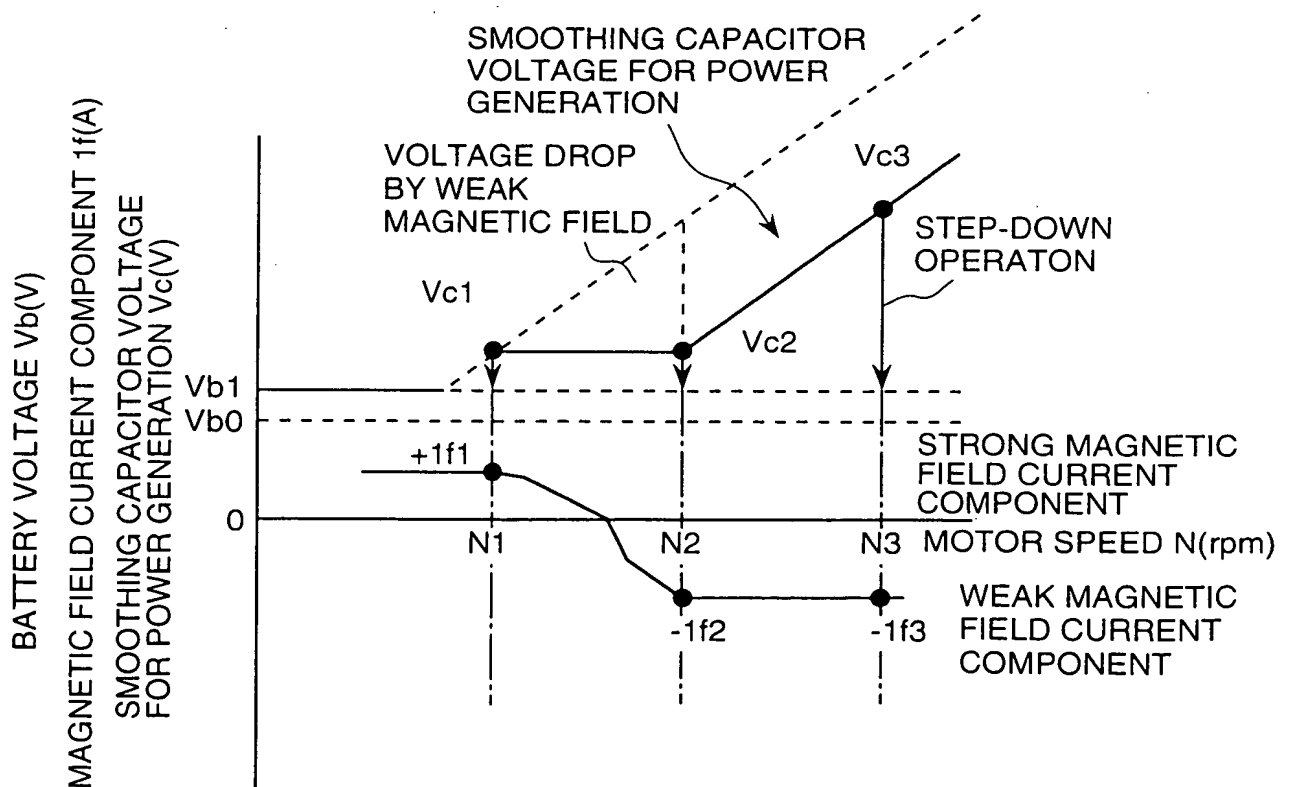
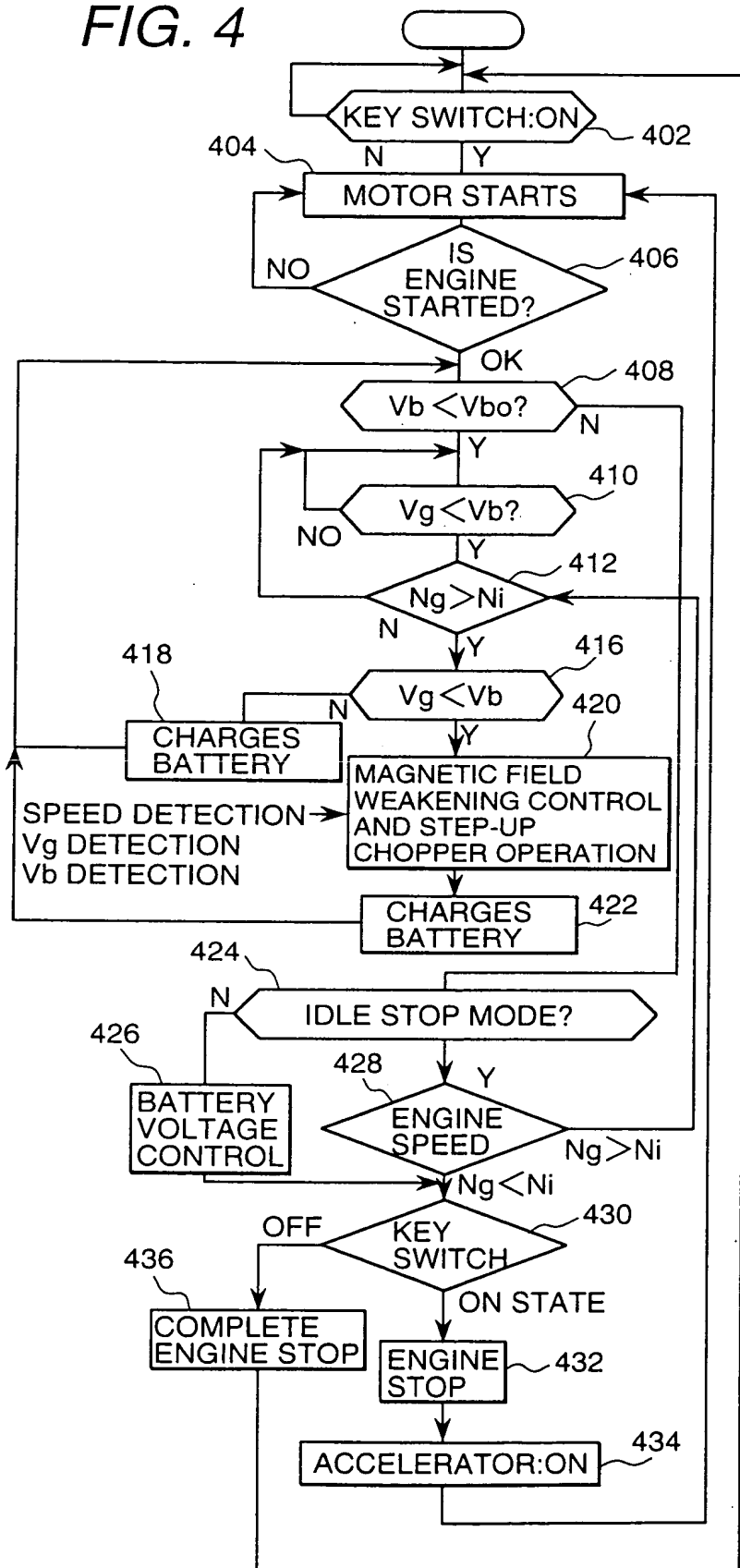


FIG. 4



ENGINE SPEED( $N_g$ )  
 IDLING SPEED( $N_i$ )  
 $V_g$ :POWER GENERATION  
 VOLTAGE  
 $V_b$ :BATTERY CHARGING  
 VOLTAGE

FIG. 6

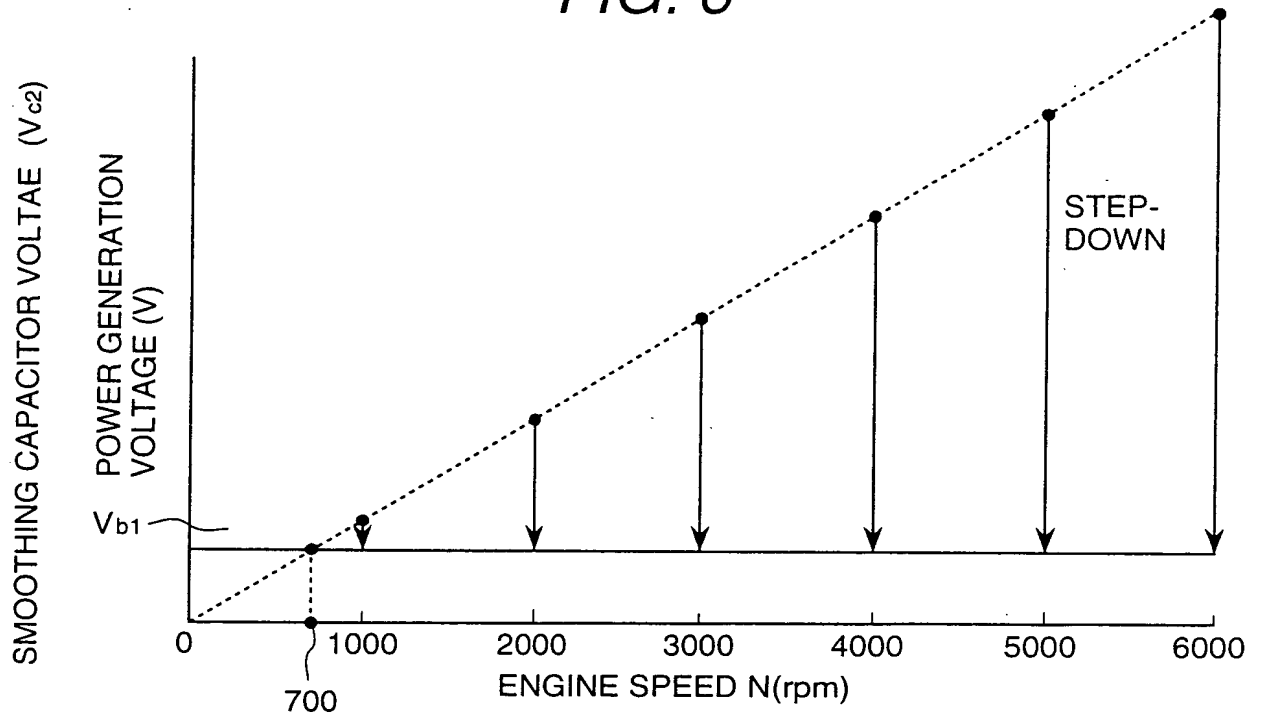


FIG. 7

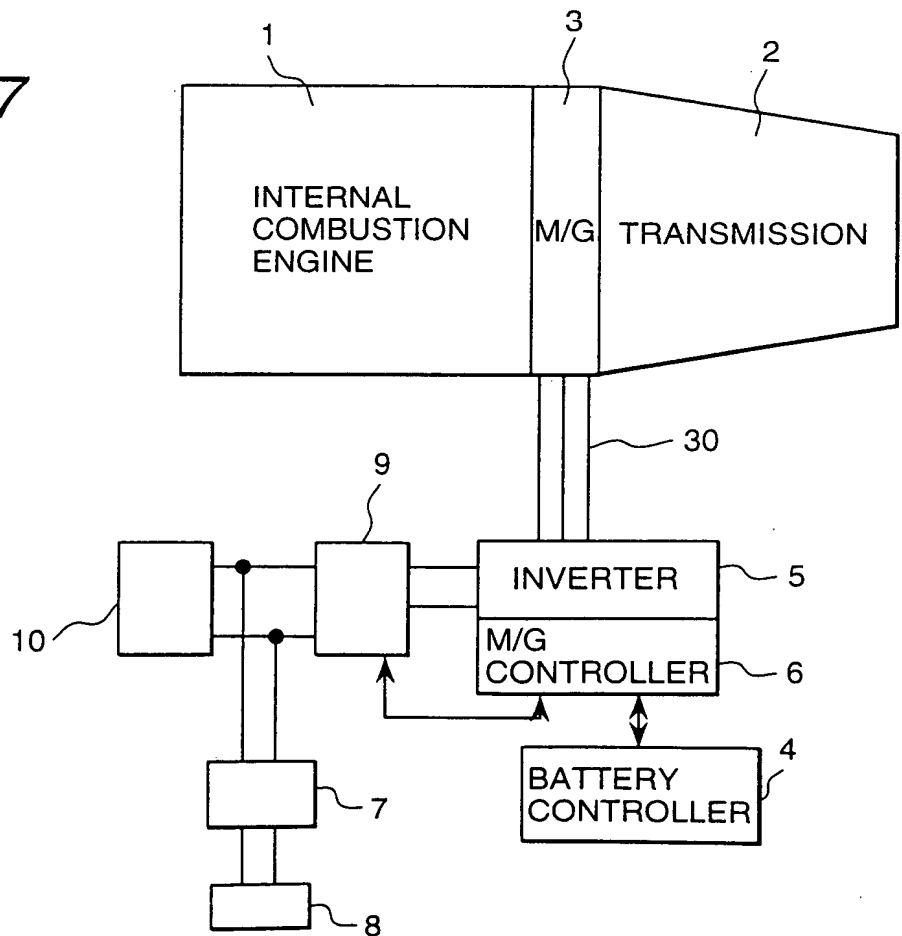


FIG. 8

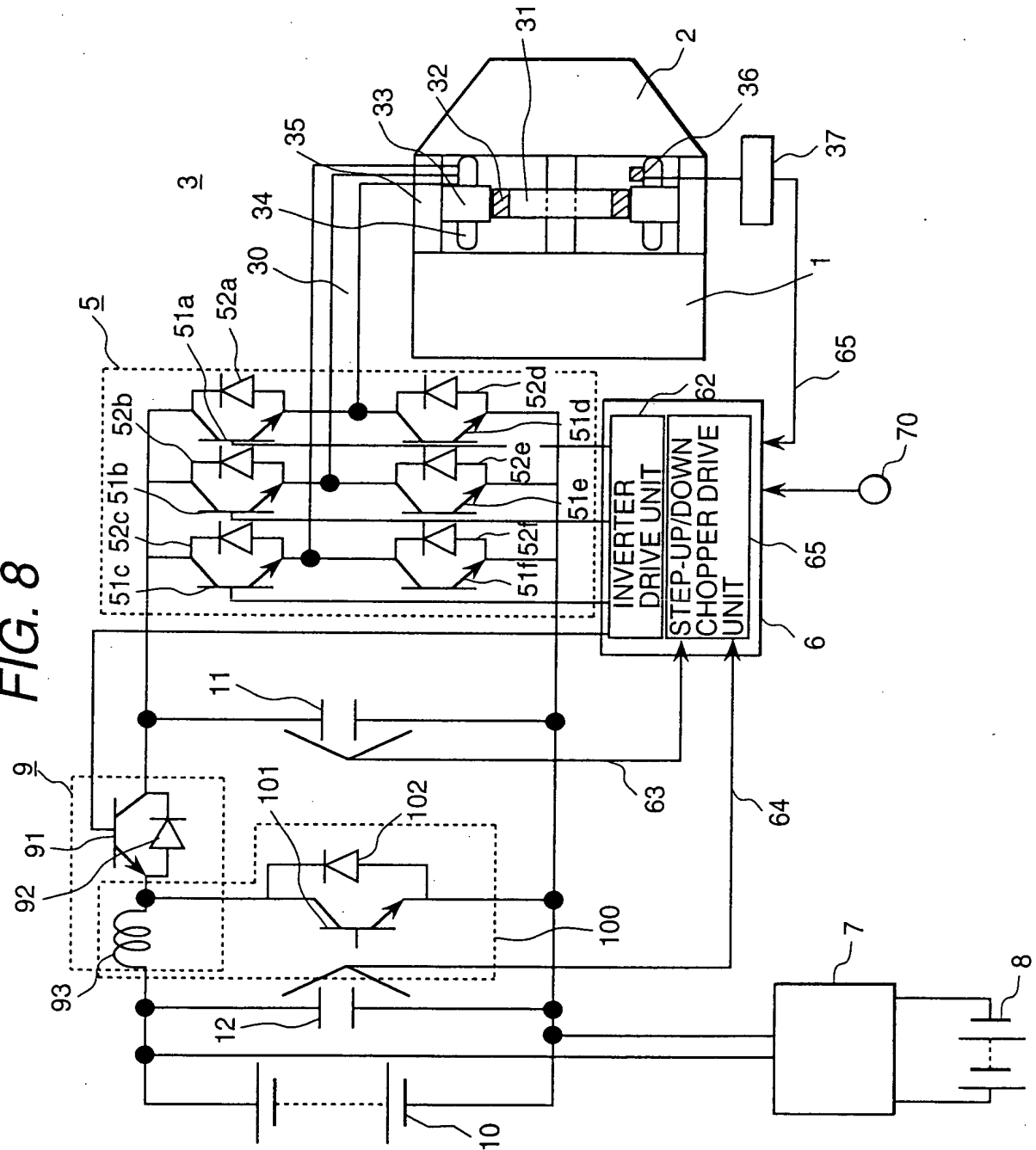


FIG. 9

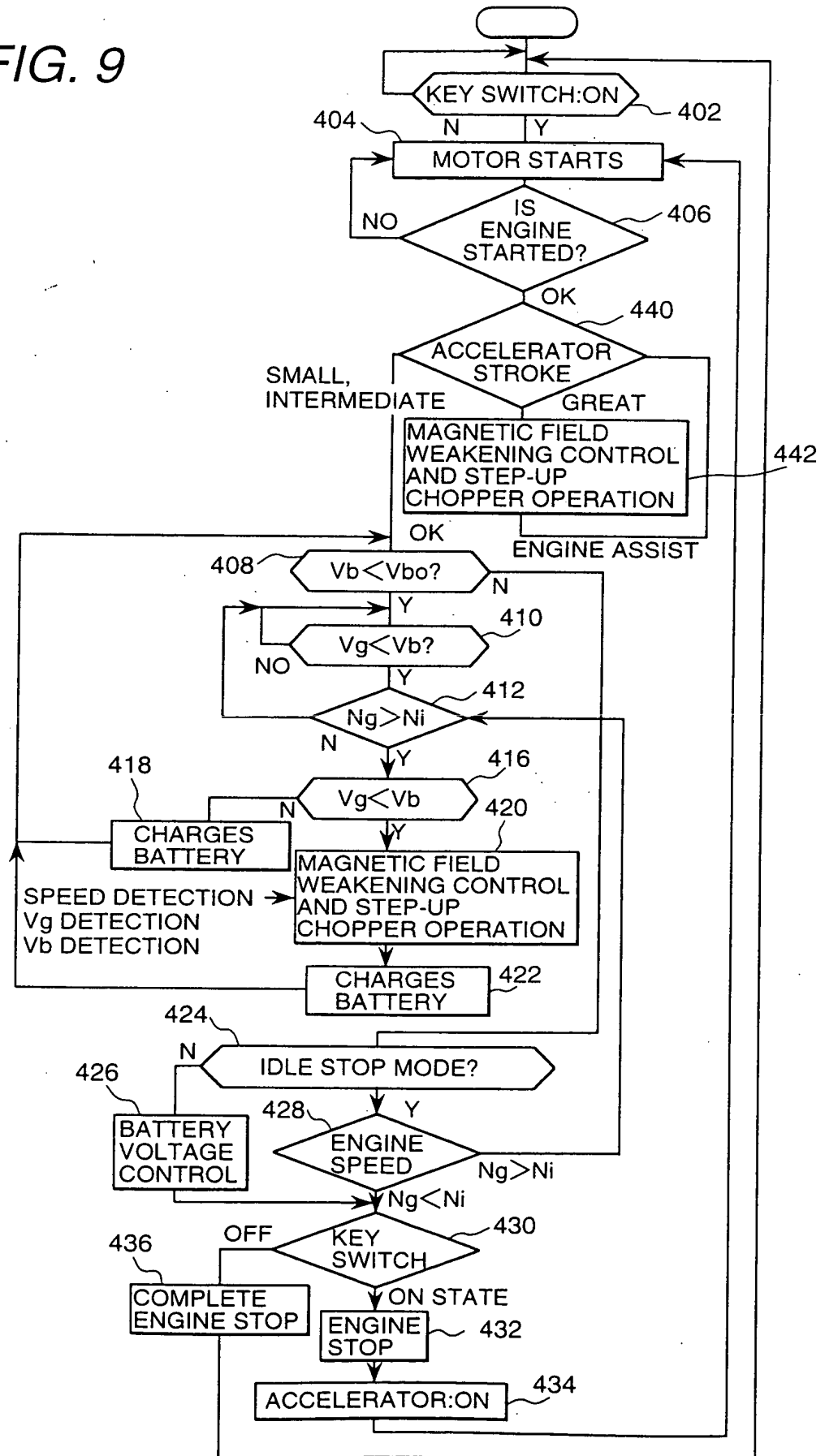


FIG. 10

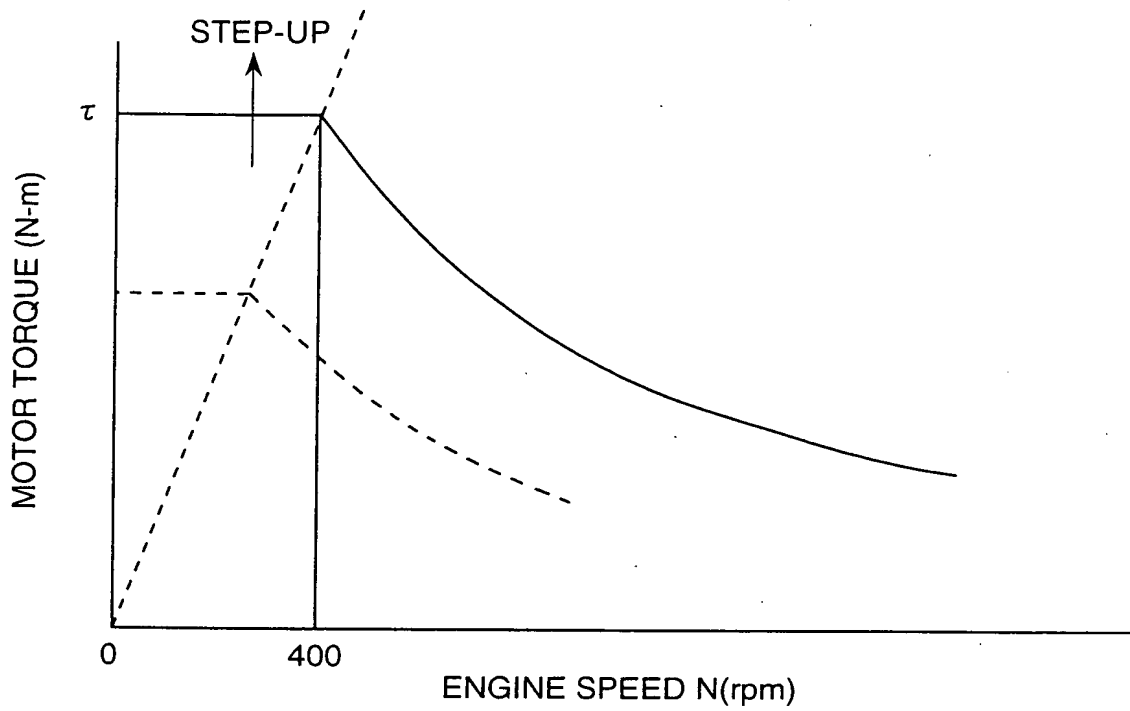


FIG. 11

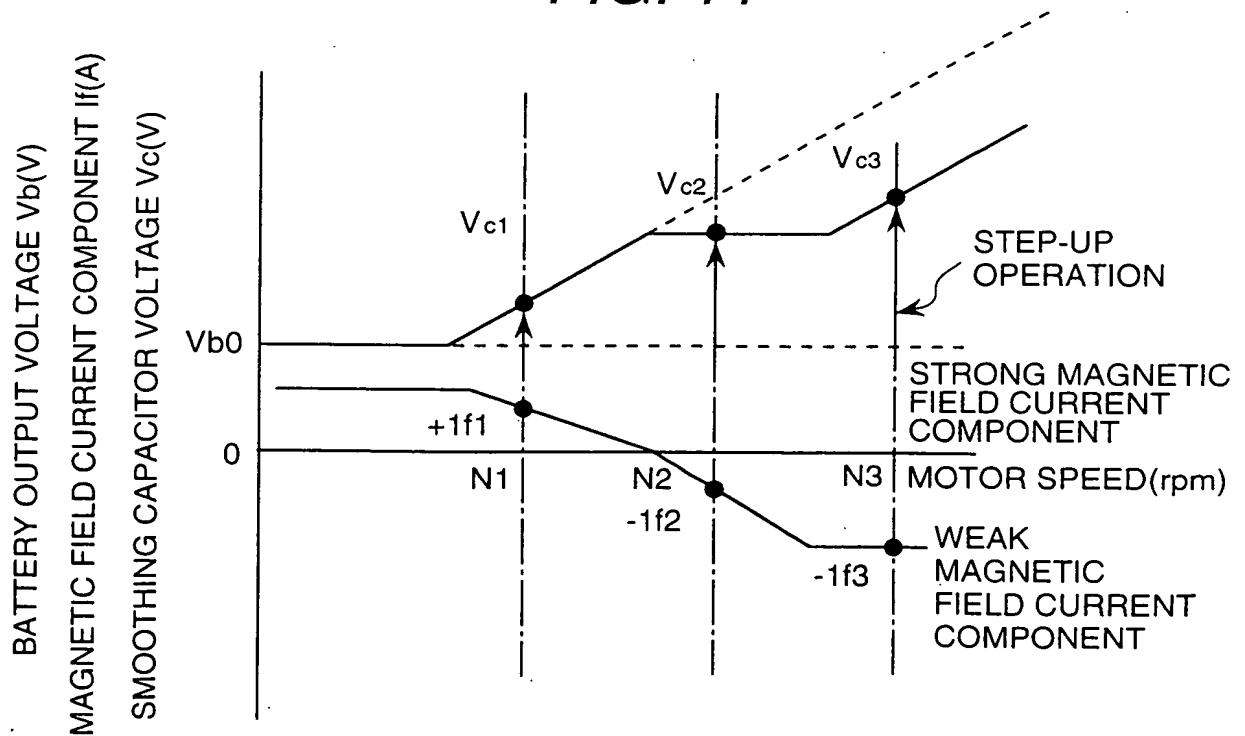




FIG. 12(a)

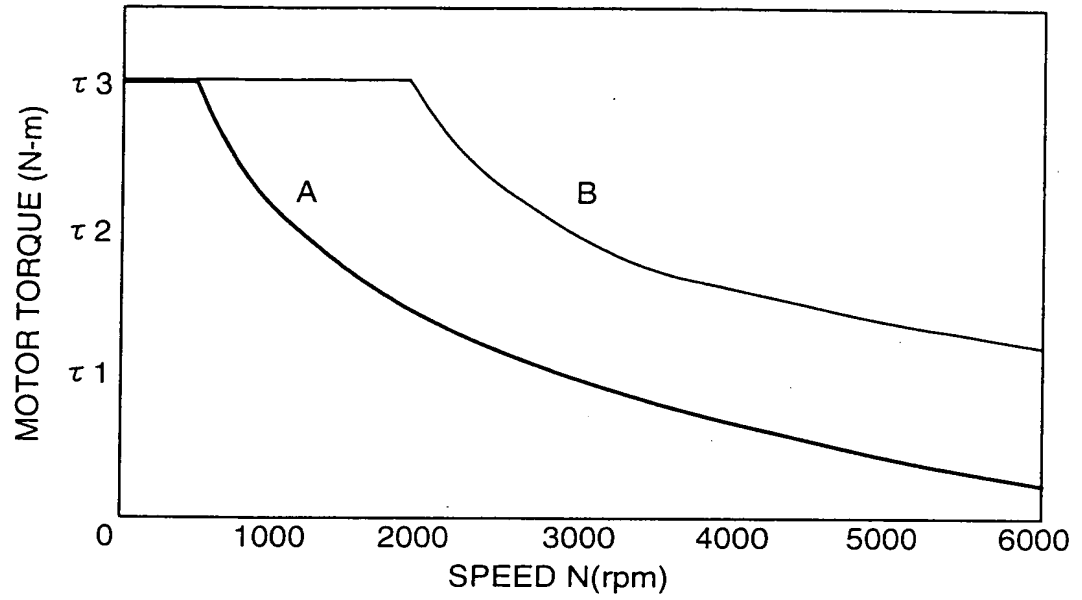


FIG. 12(b)

